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Primary Type: Virtual Manipulative

**Direct Link:** [http://www.wiley.com/college/boyer/0470003790/animations/catalysis\\_energy/catalysis\\_energy.htm](http://www.wiley.com/college/boyer/0470003790/animations/catalysis_energy/catalysis_energy.htm)

## Catalysis

This interactive animation presented here helps in understanding the concept of catalysis, which is defined as the process of accelerating the process of chemical reaction with the use of a catalyst. This visual conceptualization will provide the students with the opportunity to test their knowledge and understanding about the concepts.

### General Information

**Subject(s):** Science

**Grade Level(s):** 8, 9

**Intended Audience:** [Educators](#), [Students](#), [Parents](#)

**Suggested Technology:** Adobe Flash Player

**Freely Available:** Yes

**Keywords:** Catalysis, Enzymes.

**Instructional Component Type(s):** [Virtual Manipulative](#), [Video/Audio/Animation](#)

**Resource Collection:** Games and Simulations

### Source and Access Information

**Contributed by:**

**Name of Author/Source:** Wiley.com

**Is this Resource freely Available?** Yes

**Access Privileges:** Public

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### Aligned Standards

Name	Description
<a href="#">SC.912.P.12.12:</a>	<p>Explain how various factors, such as concentration, temperature, and presence of a catalyst affect the rate of a chemical reaction.</p> <p><b>Clarifications:</b></p> <p>Various factors could include: temperature, pressure, solvent and/or solute concentration, sterics, surface area, and catalysts. The rate of reaction is determined by the activation energy, and the pathway of the reaction can be shorter in the presence of enzymes or catalysts. Examples may include: decomposition of hydrogen peroxide using manganese (IV) oxide; nitration of benzene using concentrated sulfuric acid; hydrogenation of a C=C double bond using nickel.</p>